**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

SMART MOBILE TECHNOLOGIES LLC,
 	
     Plaintiff,
 	
 v.
 	
 APPLE INC.,
 	
     Defendant.
	Case No. 6:21-cv-00603-ADA-DTG

SMART MOBILE TECHNOLOGIES LLC,
 	
     Plaintiff,
 	
 v.
 	
 SAMSUNG ELECTRONICS CO., LTD., and SAMSUNG ELECTRONICS AMERICA, INC.,
 	
     Defendants.
	Case No. 6:21-cv-00701-ADA-DTG

**PLAINTIFF'S RESPONSIVE CLAIM CONSTRUCTION BRIEF
REGARDING THE '434 PATENT FAMILY**

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I.   INTRODUCTION

Defendants propose constructions for only eight of the fourteen terms or phrases at issue in the '434 Family patents.[1] As explained below, Defendants' constructions suffer from numerous of deficiencies, including ignoring (or misrepresenting) relevant disclosure in the intrinsic evidence and seeking artificially narrow constructions based on a spurious "plain meaning" that their own extrinsic evidence contradicts. In addition, they contend that four phrases are indefinite, but again ignore the understanding of a POSITA and relevant disclosure in the common specification and prosecution files of the patents. Their showing, even with the conclusory and unsupported testimony of their expert, falls far short of proving indefiniteness by clear and convincing evidence. Smart Mobile's constructions, conversely, are based in the intrinsic evidence and a clear explanation of the relevant POSITA knowledge. The Court should adopt the constructions proposed by Smart Mobile.

II.   ARGUMENT

A.   "system on a chip" ('291 Patent, claims 5, 16)

Smart Mobile's Construction	Defendants' Construction
An integrated circuit that includes the components for multiple functions of a system on a single chip.	Plain and ordinary meaning.

"System on a chip" would have been understood by a POSITA, in 1999, to refer to an integrated circuit that includes the components for multiple functions of a system on a single

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[1] Defendants filed identical briefs and exhibits in the two above-captioned cases. Smart Mobile intends to do the same. Accordingly, for ease of use, all citations to briefing and evidence herein will be to materials filed in the Apple case, and should be understood to apply with respect to both of the above-captioned cases.

chip. Ex. 1001, ¶¶123, 129. This is reflected, for example, in the Microsoft Computer

Dictionary, p. 432 (4th ed., 1999):

> **system-on-a-chip** *n.* The integration of multiple func-
> tions on a single computer chip. In addition to the
> incorporation of functions such as a floating-point
> unit, a system-on-a-chip might also include display,
> communications, and other components that contrib-
> ute to a functional computer system.

Ex. 1006, p. 432.

The claim language and specification of the '291 Patent also support Smart Mobile's

construction. Ex. 1001, ¶124. The system of claim 5 is a "communication system <u>including one</u>

<u>or more communication modules and processors</u> for use in a portable handheld mobile device."

Ex. 11, 12:28-32 (emphasis added). It is this "communication system" that is "implemented as a

system on a chip." Id., 12:31-32. And claim 16 provides further guidance, reciting that the

"communication module" of claim 1 – i.e., a subsystem of the "communication system" of claim

5 – is itself implemented as a system on a chip. So, "system on a chip" as used in the '291 Patent

refers to a single chip that integrates the components for multiple functions (e.g.,

communications and main processing) of a system. The specification supports this conclusion,

stating for one embodiment that "[p]rocessor 506 is the complete electronics inclusive of DSP,

CPU, memory controller, and other elements essential to process various types of signals" and

may be implemented as a "single chip" solution. Id., 4:54-58. Thus, the intrinsic and most

pertinent extrinsic evidence support Smart Mobile's construction.

Defendants assert that "system on a chip" should be given its "plain and ordinary

meaning," but they proffer conflicting evidence as to what that meaning is. Their expert says

that a "system on a chip" refers to "a single chip that contains an entire system," Ex. 1, ¶69, but

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most of his extrinsic references define the term more broadly ("An integrated circuit (also known

as a "chip") that integrates all or most components of a computer or other electronic system.").

Id. (emphasis added). In addition, these purported references appear to long post-date the '291

Patent's 1999 priority date, Ex. 1001, ¶¶125-28, and are not even submitted as exhibits. The sole

dictionary definition they proffer also supports a definition broader ("all major elements of a

system . . . ."), Ex. 30, at 13, than that of their expert. Defendants' conflicting dictionary

definitions highlight the need for a construction of this term and Smart Mobile's is well-

supported; the Court should construe as Smart Mobile requests.

B. **"A communication system including one or more communication modules and processors for use in a portable handheld mobile device with a plurality of antennas, said communication system implemented as a system on a chip, said system comprising:" ('291 Patent, claim 5)**

Smart Mobile's Construction	Defendants' Construction
Plain meaning, with the exception of "system on a chip," which should be construed as proposed by Smart Mobile.	The preamble is limiting

Smart Mobile agrees that the preamble of claim 5 is limiting.

C. **"is configured to" ('434 Patent, claims 1, 6; '653 Patent, claims 1, 4, 8, 14, 17, 27); '946 Patent, claims 1, 4, 8, 14, 17, 27; '291 Patent, claim 5; '083 Patent, claims 5, 8, 12; '943 Patent, claims 1, 5, 8, 12)**

Smart Mobile's Construction	Defendants' Construction
Programmed or equipped with hardware or software to	Plain and ordinary meaning, which is "actually programmed to"

Defendants propose that "configured to" require that a device be "actually programmed

to" do a thing. Here, Defendants are attempting to cobble together a construction from disparate

sources in an apparent effort to construct an argument that their products don't infringe unless

they are "toggled on out of the box." This argument has been repeatedly rejected by courts that

have addressed it. This Court should similarly reject Defendants' unsupported construction.

First, Defendants' own cases do not support their proposed construction.[2] For example,

in *SIPCO, LLC v. ABB, Inc.*, 2012 WL 3112302, at *10-11 (E.D. Tex. July 30, 2012), the court

construed "configured to" as "actually programmed <u>or equipped with hardware or software</u> to . .

." *Id*. (emphasis added). Defendants omit the underlined portion of this construction from their

citation to this case, but it is important to capture the full scope of the claim language. The same

language – and the same omission – are evident in another of Defendants' cases, *Polaris

PowerLED Tech., LLC v. Samsung Elec. America Inc. et al*., No. 2:17-cv-715-JRG (Dkt. 333), at

*3 (E.D. Tex. Jun. 7, 2019).

In yet another of Defendants' cases, *Radware Ltd. v. A10 Networks, Inc*., 2014 WL

1572644, at *12-13 (N.D. Cal. Apr. 18, 2014), the court construed "configured to" as

"programmed to [perform certain functions]." *Id*., at *13. However, the court further explained

that "if a device comes programmed with specific claimed functions it falls within the claims,"

and that its construction "does not require user intervention if the feature claimed is included in

the product as supplied." *Id*. And in a subsequent ruling applying its construction, the court

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[2] Defendants also cite *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc*., 672 F.3d 1335, 1349 (Fed. Cir. 2012) and *Typhoon Touch Techs., Inc. v. Dell, Inc*., 659 F.3d 1376, 1380 (Fed. Cir. 2011). Neither of these cases is on point. In *Aspex,* the court addressed the construction of "adapted to," not "configured to," the court's analysis was heavily driven by the particulars of the intrinsic evidence describing the invention, and the claim was directed to a simple mechanical structure rather than a software or programming structure. *Aspex*, 672 F.3d at 1348-49. The opinion therefore has nothing useful to say concerning the construction of "configured to" here. In *Typhoon Touch*, the limitation at issue recited ""a memory for storing at least one data collection application configured to determine contents and formats of said inquiries displayed on said screen." *Typhoon Touch*, 659 F.3d at 1379-80. The court did not specifically address the "configured to" language, instead focusing on the "memory for storing" language. In addition, the court's conclusion appears to have been driven by narrowing language in the specification that is absent here. *Id*., at 1381. Finally, the construction adopted by the district court and affirmed by the Federal Circuit required only that "the memory function is present in the device in that the device is structured to store at least one data collection application," which is consistent with Smart Mobile's construction here.

rejected the defendants' arguments that their products did not infringe because they could not

perform the claimed functionality "out of the box":

> The court construed "configured to" as "programmed to [perform certain functions]. This
> does not require user intervention if the feature claimed is included in the product as
> supplied." . . . . [T]he court explicitly addressed these summary judgment arguments with
> the second part of its claim construction, holding that user intervention is not required "if
> the feature claimed is included in the product as supplied." CCO at 21–22. Because the
> necessity of user intervention does not mean that the accused products are not
> "configured" to perform the claimed function under the court's construction, the court
> denies the defendants [sic] summary judgment . . . .

Radware, Ltd. v. A10 Networks, Inc., 2014 WL 2738538, at *14 (N.D. Cal. Jun. 11, 2014).

Other cases in the summary judgment or JMOL context similarly reject a construction

requiring that a functionality be toggled on "out of the box." Similarly, in *Brocade*

Communications Systems, Inc. v. A10 Networks, Inc., 2013 WL 831528, at *9-12 (N.D. Cal. Jan.

10, 2013), the defendant argued that its products did not infringe claims reciting a switch

"configured to" perform various functions until a customer had activated the specified functions.

The court rejected this argument, holding it sufficient that the software on the accused devices

could perform the infringing functions.

And again, in *Sonos, Inc. v. D&M Holdings Inc.*, 2017 WL 3669514, at *1 (D. Del. Aug.

24, 2017), defendants moved for summary judgment, arguing that "configured to" required "that

the accused products be plugged in, connected to a data network, and otherwise set up as

described in the claims before finding infringement." The court rejected this contention, holding

that "[i]f the accused products ship with firmware pre-installed that enables the end user to

utilize the functions described in the asserted claims, then that is all that is necessary for the sale

or importation of the product to constitute infringement." *Id*.

More recently, in *TQ Delta LLC v. Adtran, Inc.*, 2021 WL 1200595, at *4-6 (D. Del. Mar.

30, 2021), the court construed "configured to" and "configurable to" as "includes the necessary

hardware and software for performing the functionality recited in the claim without the need to

rebuild, rewrite or recompile the code for, or redesign any of that hardware or software." The

court then granted summary judgment of infringement, holding that the presence of the

infringing code in the accused devices demonstrated infringement even though the accused

functionality was disabled by default in the product as sold.

So, the caselaw supports Smart Mobile's construction. In addition, since the parties agree

that "configured to" is a term of drafting art, Dkt. 46, p. 8, Defendants' extrinsic evidence from

their expert and from technical dictionaries is irrelevant. *Radware,*, 2014 WL 1572644, at *12

("Here, nothing in the specification suggests that the inventors used the term 'configured to' in a

technology-specific manner, rather than as a patent term of art. Thus, the definitions cited by

defendants which require actively setting up computer programs are not persuasive."); *Uretek*

Holdings, Inc. v. YD West Coast Homes, Inc., 2016 WL 7115987, at *1 (M.D. Fla. 2016)

(refusing to permit expert testimony at claim construction hearing where the expert was going to

testify only as to legal conclusions rather than specifics of the technology).

Further, the claims and the specification[3] cut against Defendants' "actually programmed

to" construction. The claims use "configured to" to refer to both software and hardware. For

example, claim 1 of the '653 Patent recites: "wherein each wireless transmit receive component

is configured to communicate using one or more protocols" [software]; "wherein the device is

configured for multi-band wireless communication" [hardware and software]; "wherein the first

wireless transmit and receive component is configured to communicate using a plurality of

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[3] The '434 Family patents share a common specification. Accordingly, arguments concerning
the teachings of the specification will generally cite to the relevant content of the '653 Patent,
with the intent that such cites be understood to encompass the identical content of the
specifications of the other '434 Family patents, as applicable.

antennas" [hardware and software]. Ex. 7, 11:65-67; 12:1-2, 7-9; Ex. 1001, ¶134. Similarly,

claim 12 recites the device of claim 1 "which is configured with a plurality of antennas and a

wireless transmit and receive component [hardware], wherein the network switch box wireless

transmit and receive component is configured to communicate a signal stream using the network

switch box plurality of antennas simultaneously" [software]. Ex. 7, 12:66-13:4; Ex. 1001, ¶134.

Defendants' construction would make a hash of these claims; how can a device be configured to

communicate using a plurality of antennas unless the antennas (hardware) are included in the

configuration?

The specification also refers to "configuration" as encompassing hardware as well as

software. Ex. 7, 5:8-11 ("The network switch box is configured with multiple processors,

multiple antennas and multiple T/R units . . . ."); 11:20-22 ("The base station or the network box,

configured as described in the present invention at the hardware level offers universal

functionality."); Ex. 1001, ¶¶135-38.

So, the court should construe "configured to" as "programmed or equipped with

hardware or software to." The "actually" adjective at the start of Defendants' proposed

construction should be rejected as it is redundant and could misleadingly suggest to a jury that

something more than hardware or software for the recited function is required. And, the "or

equipped with hardware or software" language is necessary in order to foreclose an effort by

Defendants later to argue, as the defendants in the *Radware*, *Brocade* and *Sonos* cases attempted

unsuccessfully to do, that the term requires a specific selection among options available to users

on the accused devices.

D.   **"wherein a transmission interface is created and wherein said transmission interface uses a plurality of IP enabled interfaces on the mobile device which utilize the plurality of wireless transmit and receive components on the mobile device to enable a single interface comprised of multiplexed signals from the plurality of wireless transmit and receive components" ('653 Patent, claim 1) / "wherein a first interface for transmission is created and wherein said first interface for transmission uses a plurality of interfaces for Internet Protocol communication on the mobile device which utilize the plurality of wireless transmit and receive units on the mobile device to enable a single interface comprised of multiplexed signals from the plurality of wireless transmit and receive units" ('946 Patent, claim 1)**

Smart Mobile's Construction	Defendants' Construction
Plain meaning, with the exception of "interface/s," and "multiplexed," which should be construed as proposed by Smart Mobile.	Indefinite

Defendants assert that the '653 and '946 Patents' "transmission interface" limitations are indefinite. To prevail, they must prove by clear and convincing evidence that "the 'claims,' not particular claim terms, 'read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.'" *Cox Commc'ns, Inc. v. Sprint Commc'n Co. LP*, 838 F.3d 1224, 1231 (Fed. Cir. 2016) (quoting *Nautilus Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014)). Defendants fail to do so.[4]

Defendants' first point of alleged ambiguity centers on the term "interface." According to Defendants, "it is unclear what the structural differences are between the interfaces recited in the "transmission interface" limitation because the adjectival language surrounding each 'interface' term is functional in nature, ..." Dkt. 46, at 10-11. This assertion is meritless. As further addressed in Section II.M below, an "interface" is a well-known concept in computer

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[4] Defendants' arguments concerning these limitations are, for the most part, identical across the two patents. Accordingly, Smart Mobile's arguments addressing the "transmission interface" limitation of claim 1 of the '653 Patent is intended to apply also to the "transmission interface" limitation of claim 1 of the '946 Patent.

science: it refers to a virtual or physical connection between software or hardware elements that enables them to interoperate. Ex. 1001, ¶140. There is no suggestion that the term is used differently in the transmission interface limitations of claim 1 of the '653 and '946 Patents. And there is no need for Smart Mobile to identify some set of "structural differences" between the interfaces, as it is the functional description in the claims that differentiates them from one another: a "transmission interface" is an interface for transmission, an "IP enabled interface" is an interface enabled for Internet Protocol, and so on. A POSITA would not be confused by this language. *Id*.

Defendants next assert that the term "single interface comprised of multiplexed signals" is "problematic" because it is identified by a "signal format" (multiplexed signals) and it is not clear what relation the signal format has to the single interface. *Id.* at 11. This is wrong – multiplexing does not refer to a "signal format," Ex. 1001, ¶141, but rather to a method of splitting and combining signal and data streams in order to accomplish specific objectives, such as maximizing the use of particular bandwidth or increasing the data rate. See Section III.N. And there is nothing unclear about this nomenclature, as it was (and is) well understood that an interface may be instantiated as a signal or data stream; Defendants' proposed construction of "interface" recognizes as much. See Section III.M.

So, the relationship between the multiplexed signals and the single interface is well defined in the claim: the interface is comprised of the signals. Ex. 1001, ¶142. Moreover, the context of the surrounding words of the claim "must be considered in determining the ordinary and customary meaning of those terms," *Brookhill-Wilk 1, LLC. v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1299 (Fed. Cir. 2003), and the context here forecloses Defendants' assertion of indefiniteness. The claim recites that the single interface is "comprised of multiplexed signals

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from the plurality of wireless transmit and receive components." Thus, a POSITA would readily

understand that the term "multiplexed signals" refers to signals from the plurality of wireless

transmit and receive components that are or were multiplexed. *Id.*   And, it was and is well

understood that an interface may be comprised of signals. *Id.*   The single interface, thus, refers

to an interface comprised of (i.e., that includes) the multiplexed signals. *Id.*

Defendants also proffer a re-written version of the claims that interpolates Smart

Mobile's construction of "interface" into the text. However, Defendants' interpolation actually

illustrates that Smart Mobile's construction would be easily understood by a layperson within the

context of the surrounding claim language.

Further, the specification discloses a single interface comprised of multiplexed signals.

The specification teaches mobile devices that can transmit and receive signals that "may be

multiplexed at each end," Ex. 7, 3:47-48, and that may have "two or more transmit/receive (T/R)

units" that may be "multiplexed for different uses." *Id.*, 9:7-11. Multiple T/R units "can be

multiplexed to process incoming and outgoing wireless signals." *Id.*, 5:8-11. And Figure 10

shows data streams from a plurality of T/R units in a device that may be "combined into data

stream 1028 and interfaced to Server C 1030." *Id.*, 7:28-30, Fig. 10. A POSITA would

understand from this example that the "single interface" refers to an interface comprised of the

multiplexed signals (such as, for example, data stream 1028) from the transmit and receive

components. Ex. 1001, ¶144.

Defendants' expert next asserts that "single interface comprised of multiplexed signals"

is not "common to the understanding of a POSITA." Ex. 1, ¶84. This misses the point; as

shown above, the term is easily comprehensible in light of the specification. Ex. 1001, p143.

Defendants' expert also asserts that a POSITA "would not understand a multiplexed format to

have any known relationship to an interface," Ex. 1, ¶84, but again this misses the point – the

relationship is stated in the claim, i.e., the signals comprising the interface are multiplexed.

Defendants' expert then complains that he does not know what "comprising" means when used

in a patent claim, but this is nonsensical as "comprising" is a term of art in patent claims.

Defendants proffer similarly flawed arguments regarding "transmission interface" and

"IP enabled interface." These terms do not refer to functions as alleged by Defendants. Rather,

they refer to interfaces with specified characteristics. Ex. 1001, ¶140.   The modifiers

"transmission" and "IP enabled" to the term "interface" connote additional structure that narrows

and focuses the meaning of the term. *WAPP Tech Ltd. P'ship v. Bank of Am., N.A*., 2022 WL

2463569, at *9 (E.D. Tex. Jul. 6, 2022) ("Thus, to whatever extent the word "interface" might be

deemed to lack sufficient structural connotations, 'the presence of modifiers' imparts structural

meaning to the disputed terms."). And while Defendants complain that the specific "interface"

phrases are not recited in the specification, definiteness does not require that the exact phrases

from the claims appear in the specification. *Id.*, at *8.

Defendants direct their second alleged point of ambiguity to "the relationship between the

'transmission' interface and the IP interfaces." Dkt 46, p. 12. According to Defendants, a

POSITA would not understand what it means for the transmission interface to "use" the IP-

enabled interfaces. But there is no ambiguity: an interface may "use" another where, for

example, a signal or data stream from the first (using) interface is sent through the second (used)

interface. Ex. 1001, ¶145.   And while Defendants state that the intrinsic record is silent, that is

both irrelevant (because the claim language is clear on its face to a POSITA) and incorrect. For

example, in one embodiment, three data streams (1002, 1004, 1006) are processed by three

transmit/receive units (e.g., Wi-Fi and cellular components) and presented to a processor. Ex. 7,

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7:21-27. The data streams may then "be *interfaced separately* with server C 1030 or *combined into data stream 1028 and interfaced* to Server C 1030":
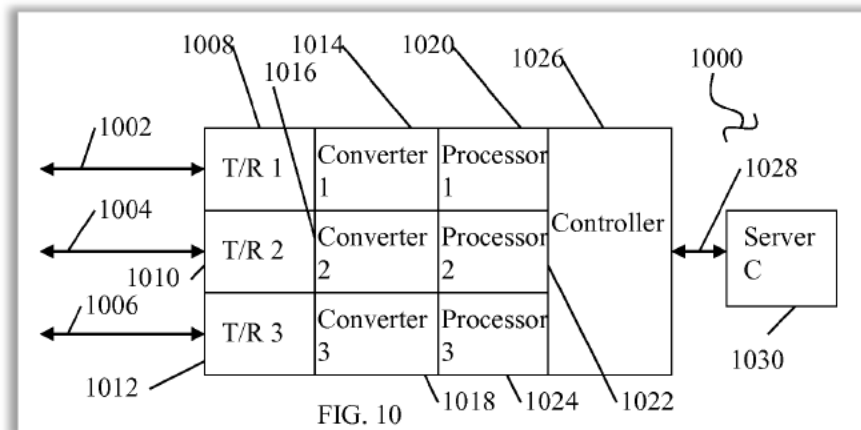
FIG. 10

Ex. 7, 7:28-30, Fig. 10 (emphasis added). A POSITA reading the transmission limitations would understand that upstream of data stream 1028, a virtual interface for transmitting the data stream to Server C would be generated. This transmission interface would then use downstream interface(s), such as virtual or physical interfaces associated with the wireless transmit/receive units of the device, as the signals from the transmission interface pass through the downstream interfaces and are sent through the wireless T/R units to Server C, as indicated at 1028. And a POSITA would understand that these interfaces would be enabled for Internet Protocol, because the specification states that they are. E.g., Ex. 7, Abstract ("A method and apparatus in which multiple Internet Protocol (IP) based wireless data transmissions are simultaneously provided between a wireless device and a server, ..."), 1:43-45 ("It is an object of the present invention to provide wireless enhancements to IP based cellular telephones/mobile wireless devices (CT/MD)."), 10:27-31 (the invention includes various features, such as "[t]he ability to have an internal IP based web server function within the CT/MD and the network switch box or an external server C connected by wired or wireless means to keep track of all the communication

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protocols within the unit and with the outside world and other units."). Ex. 1001, ¶¶146-47. A POSITA would understand this; there is no ambiguity. *Id.*

Defendants' third alleged point of ambiguity concerns "a plurality of IP enabled interfaces on the mobile device which utilize the plurality of wireless transmit and receive components." Dkt. 46, p. 12. Defendants assert that the "most grammatically correct reading [of the term] is that the 'which utilize . . .' clause modifies the 'plurality of IP enabled interfaces . . . .'" *Id.* They then contend that this interpretation "would require that . . . the 'single interface' is comprised of the multiple "transmit and receive components," which would allegedly conflict with other terms of the Patent. *Id.*

Here, Defendants attempt to manufacture indefiniteness by rewriting the claims. A POSITA would read the claim as it is written: the plurality of IP enabled interfaces utilize the transmit and receive components. Ex. 1001, ¶148. But nothing about this language requires that the single interface be *comprised* of multiple transmit and receive components. Ex. 1001, ¶150. Nor do Defendants offer any explanation as to why an additional limitation should be read into the claim. The claims must be construed as written. *Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1344 (Fed. Cir. 2009), *amended on reh'g in part*, 366 F. App'x 154 (Fed. Cir. 2009). As written, the claims are not indefinite.

Defendants' fourth point of alleged ambiguity relates to a decontextualized interpretation of the term "single interface." According to the Defendants, "single interface" could refer to "one, and only one" interface that is comprised of multiplexed signals or "one, and only one" interface within the device. Both interpretations ignore the context of the claim, which recites that the single interface is "comprised of multiplexed signals *from the plurality of wireless transmit and receive components*." Nothing in this limitation would suggest to a POSITA that

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this recitation would limit the entire mobile device to only a single interface or to only a single interface comprised of multiplexed signals. Ex. 1001, ¶¶152-53. A POSITA would understand that the single interface comprises multiplexed signals from the "plurality of wireless transmit and receive components" recited in the claim. *Id.*

So, each of Defendants' four points of alleged ambiguity is based on a misreading of the text or willful blindness as to context. The Court should reject their assertion of indefiniteness.

E. **"wherein the first wireless transmit and receive component is enabled to communicate using one or more antennas simultaneously/ wherein the first wireless transmit and receive unit is enabled to communicate using one or more antennas simultaneously" ('653 Patent, claim 14; '946 Patent, claim 14)**

Smart Mobile's Construction	Defendants' Construction
Plain meaning.	Indefinite

Defendants contend that a POSITA would not understand what it means to use "one or more antennas simultaneously." However, this is not a difficult interpretive question: the challenged language means that the first wireless transmit and receive component or unit is enabled to communicate using one antenna, or multiple antennas simultaneously. Ex. 1001, ¶156.

Defendants assert that the claim cannot be referring to simultaneous communication using multiple antennas, because the claims contemplate using one antenna. They fail to explain why this is a problem; the fact that the claims recite using "one or more antennas" presents no interpretive difficulty, as it clearly means using either one antenna, or more than one (i.e., two or more) antenna. Ex. 1001, ¶157. Nor would a POSITA find it difficult to understand "using . . . more [than one] antennas simultaneously;" this means using two, or three, or four, etc. antennas simultaneously. Ex. 1001, ¶159. Nor would a POSITA be flummoxed as to whether one

antenna must be used "simultaneously;" it does not, as a plain English reading of the text suggests that it is the "or more [than one] antennas" that must be used "simultaneously." *Id*.

While Defendants proffer declaration testimony from their expert, it is entitled to no weight. First, the purported indefiniteness arises not from some technical ambiguity, but from an alleged grammatical issue that anyone with a working knowledge of the English language could unravel. Second, Defendants' expert does not explain why a POSITA would not understand the cited term, but merely repeats various iterations of categorical assertions that are, as shown above, incorrect. Accordingly, the expert testimony is conclusory and therefore entitled to no weight. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1318 (Fed. Cir. 2005) (en banc).

The claim language is sufficiently clear on its face, but even if it were not the specification would make it so. The specification expressly contemplates using multiple antennas for simultaneous transmissions. For example, the Abstract describes the invention as:

> A method and apparatus in which multiple Internet Protocol (IP) based <u>wireless data transmissions are simultaneously provided</u> between a wireless device and a server, including providing <u>multiple antennas</u>, multiple T/R units, multiple processors and multiple I/O ports on the wireless device. The method includes receiving multiple IP data packets on the I/O ports at <u>substantially the same time</u>, and sending multiple data packets from the wireless device to the server, whereby the transmission rate between the wireless device and the server is increased.

Ex. 7, Abstract (emphasis added). The specification teaches that "one or more" antennas may be used in the mobile device of the invention. Ex. 7, 2:55-57. When multiple antennas are used, the invention may support multiple simultaneous communication paths. Ex. 7, 6:20-29 ("The multiple T/R units and antennas 710 allow multiple simultaneous communication paths . . . .").

So, the claim language and the specification make it clear to a POSITA what the challenged phrase means. Ex. 1001, ¶¶160-61. In order to manufacture an interpretive conundrum, defendants excise "or more" from the claim, positing that a POSITA would be

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stumped by the phrase "using one [] antenna simultaneously." Dkt. 46, p. 14. But that is not what the claim recites. Defendants then suggest that to avoid indefiniteness Smart Mobile seeks to rewrite the claim, when that is exactly what Defendants do in order to bolster their argument. The claim as written is clear to a POSITA, and that is all that is required. Defendants fail to prove that the claims are indefinite.

F.   "USB communication" ('291 Patent, claim 5; '946 Patent, claim 5)

Smart Mobile's Construction	Defendants' Construction
Plain meaning.	USB technology at use at the time of filing (1999)[2]

Defendants propose that the meaning of "USB communication" is "USB technology at use at the time of filing (1999)." While it is true that a claim term should be construed as it would have been understood by a POSITA as of the effective filing date of the patent application, *Phillips*, 415 F.3d at 1313, that does not mean that the "technology" of a recited term is frozen as of the filing date. *SuperGuide Corp. v. DirecTV Enter., Inc.*, 358 F.3d 870 (Fed. Cir. 2004) ("regularly received television signal" not limited to analog signals, despite the fact that ordinary television sets as of the patent priority date could only receive analog signals).

Nothing in the claims or the specification suggests that "USB" should be limited to a particular version of the hardware and software. First, the claim itself refers to USB in a generic fashion, in a similar fashion to other generic terms in the claim: "wherein the system supports video processing, wireless wide area network communication and local area network communication, and USB communication." The claim does not recite any particular version of a USB device or USB protocol; rather it refers generically to "USB communication," i.e., with USB as an adjective (not a noun) defining a category of "communication." This is sufficient to foreclose Defendants' version-specific construction. Ex. 1001, ¶162.

Nor does the specification support Defendants' construction. It defines "USB" as an acronym for "universal serial bus," without any reference to any particular state of development. Ex. 11, 6:43, 9:20, 47. Nothing in the specification references or attributes any significance to any particular version of the USB protocol; in fact, the specification does not reference the USB protocol at all. The use of USB to refer to a communication channel is clearly generic, paired as it is with telephone, cable, fiber optic and wireless communication channels, all of which are generic. Ex. 11, 8:12-17. This is parallel to the generic use of the term in the claim, and undermines Defendants' contention that the term must be limited to a particular state of technological development. Ex. 1001, ¶163.

Neither of the cases Defendants cite supports their proposed construction. In *Fundamental Innovation Sys. Int'l LLC v. Samsung Elecs. Co.*, 2018 WL 647734, at *11 (E.D. Tex. Jan. 31, 2018), the patent in suit taught and claimed a new type of "Universal Serial Bus ('USB') adapter for providing a source of power to a mobile device through a USB port, comprising" specific structure. *Id.*, at *7. So, the structure and programming of the adapter were at the heart of the claimed invention. In addition, the patent in that case specified that it was using the term 'USB' to refer to a particular 'industry standard port,'" and included content indicating "that the patentee was referring to the 'current' USB specification in existence at the time of the claimed invention." *Id.*, at *10. In short, the claims and specification made it clear that the particular USB protocol itself was central to the scope of the claimed invention. Here, by contrast, nothing in the claims, the specification or the prosecution file suggests that a particular USB protocol or version is significant to the scope of the invention.

Defendants' second case, *Uniloc USA, Inc. v. Apple, Inc.*, 2021 WL 432183, at *8-9 (N.D. Cal. Jan. 15, 2021), actually undermines defendants' proposed construction. In *Uniloc*,

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Apple argued that "Bluetooth messaging" and "Bluetooth protocols," necessarily referred to

Bluetooth as it existed at the time of the invention and did not cover later versions of Bluetooth.

The court <u>rejected</u> Apple's position, instead adopting the plaintiff's alternative construction

focusing on "the <u>functionality</u> described or defined in the Bluetooth Core Specification versions

in question—namely, whether aspects of the Bluetooth technology that are material to the

claimed invention have changed in any meaningful way over time." *Id*., at *8 (emphasis added).

Accordingly, the Court recommended that the terms be construed to mean "Bluetooth

[messaging/protocols] as defined in the Bluetooth specification versions 1.1 or earlier (including

versions 1.0A and 1.0B), <u>and that remain in later versions of the Bluetooth specification</u>." Id., at

*9 (emphasis added). As the court noted, this construction would focus the infringement inquiry

not on whether a particular protocol version was still in use, but whether any differences between

the earlier standard and the later standard were material to the claimed invention.

Several additional cases reject Defendants' argument outright. In *Cellspin Soft, Inc. v.*

Fitbit, Inc., 2021 WL 1417419, at *9-10 (N.D. Cal. Apr. 14, 2021), the defendant asserted that

claim terms incorporating a reference to "Bluetooth," such as "Bluetooth enabled data capture

device," were limited to the versions of Bluetooth available at the time of the invention. The

court rejected this argument, holding:

> On balance, the Court finds that the better view is to not limit technical standards to any version. Defendants seek, in effect, a "standards" exception where technologies described by a technical specification are limited to particular versions. They acknowledge, however, that this would not be appropriate for other terms. For instance, Defendants do not argue that a "mobile device" recited in the claims should be limited to devices that existed in 2007 (e.g., the original iPhone). (Tr. at 21:20-22:10.) That rule makes sense because limiting technologies to a specific time would defeat infringement through differences that have no bearing on a person of ordinary skill in the art's understanding of a term—e.g., a car is no less of a car because it uses ignition in place of the original crank.

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Id., at *10. The court therefore declined to limit "Bluetooth" to the version available as of the invention date.

Celltrace LLC v. AT & T Inc., 2011 WL 738927, at *15-17 (E.D. Tex. Feb. 23, 2011), is another illustrative case. In *Celltrace*, the defendant argued that "GSM-compatible" should be limited to the version of the GSM standard as of the date of invention. The court rejected this argument, holding that the claims did not include language indicating that they were limited to then-existing GSM standards and that therefore "the language of the claims are sufficiently broad and may include after-arising GSM standards." Id., at *16.

Similarly, in *Soverain Software LLC v. Amazon.com, Inc.*, 2005 WL 6225276, at *4-5 (E.D. Tex. Apr. 7, 2005), the court determined that "hypertext transfer protocol" was "a generic term not limited to the version in use at the time the application was filed," because the plaintiff "is not claiming to have invented HTTP, but only that the methods described use HTTP." *Id.*, at *5. Here, as in *Soverain*, Smart Mobile does not claim to have invented USB structure or hardware, but rather simply recited it in functional terms as an element of the claimed structure.

Accordingly, the Court should reject Defendants' construction limiting "USB communication" to the 1999 version of USB. Plain meaning will suffice.

G.   "dynamically" ('434 Patent, claim 1; '863 Patent, claim 4)

Smart Mobile's Construction	Defendants' Construction
When and as needed, responsive to variable conditions and without the need for user intervention.	Indefinite.

Defendants contend that "dynamically" in claim 1 of the '434 Patent and claim 4 of the '863 Patent is ambiguous, and that the specification provides no guidance as to what the term means. Neither is true. First, a POSITA would easily understand what the term means. Ex. 1001, ¶168. As used in the '434 Patent, the term describes the manner in which the wireless

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device switches between use of the first and second antenna. Ex. 6, 12:2-4. In claim 4 of the

'863 Patent, the term describes the manner in which a server controls and changes the network

flow between first and second network box. Ex. 8, 12:21-26. In both contexts, "dynamic"

"describes some action or event that occurs when and as needed." Ex. 1001, ¶166; Ex. 1005, p.

165. And the context of the claims makes it clear that no user intervention is required, as the

recited wireless device "is configured to dynamically switch" or the server "is configured to

dynamically control and change the network flow," i.e., it is the device, not a user, that causes

the recited action to happen.

Second, were further explanation necessary (and it is not), the specification provides it.

The specification associates the term "dynamically" with something that occurs when and as

needed, responsive to variable conditions:

> the software capability that is resident internally to the unit, at the local server C level or
> network server C level, is capable of dynamically determining a number of factors for
> best data transfer. As an example, the unit can determine the best transmission
> frequencies and protocols, determine the best error correction and channel coding
> algorithms and multiplexes the transmission paths and tasks.

Ex. 6, 11:15-22; Ex. 8, 11:23-30. This bears directly on the structure recited in the claims, which

looks to dynamically switching between two antennas or two network flows. And it is clear

from this example that "dynamically" performing a function is done without user intervention, as

the specification recites that it is "the software capability" that enables the dynamic

determination. Ex. 1001, ¶167. Accordingly, Defendants' assertion that the specification

"provides no guidance" is meritless.

Rather than addressing the Microsoft Press Computer Dictionary – which Smart Mobile

identified to Defendants as extrinsic evidence supporting Smart Mobile's construction –

Defendants cite to several inapposite definitions from other dictionaries, only one of which is a

technical dictionary. And the definition they cite ("[e]vents are constantly changing") is so

vague as to be useless. Defendants' expert declaration on this point is similarly worthless; it

addresses usages of dynamic that the expert admits are not relevant to the claims at issue, Ex. 1,

¶¶34-35, but proffers no analysis of claim 1 or the specification, and fails to address the clearly

relevant definitions in the Microsoft Computer Dictionary. This conclusory testimony is entitled

to no weight. *ActiveVideo Networks, Inc. v. Verizon Comm'ns, Inc.*, 694 F.3d 1312, 1327-28

(Fed. Cir. 2012). Read in the context of claim 1, it is clear what "dynamically" means, and

Defendants proffer nothing sufficient to carry their burden of proving indefiniteness.

H.   **"ports" ('653 Patent, claims 14, 15, 28; '863 Patent, claim 1; '946 Patent, claims 14, 15, 28, 29; '291 Patent, claims 6; '083 Patent, claim 1; '075 Patent, claim 1)**

Smart Mobile's Construction	Defendants' Construction
A virtual or physical point of connection through which information may be transferred.	Plain and ordinary meaning, which is a jack or socket that a cable connector plugs into

Defendants contend that "ports" should be construed to comprise only physical ports.

However, the claims and the specification dictate a different result.

First, with only a single exception,[5] all of the claims at issue recite "a plurality of ports"

that are a part of a wireless or handheld device that includes wireless communication

units/components and antennas. Defendants' proposed construction would tie the claimed

wireless, handheld devices to a physical tether. Such a construction makes no sense in light of

the structure of the claimed devices, Ex. 1001, ¶169; this is sufficient reason for this Court to

reject it. *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1362 (Fed. Cir.

2004), *cert. dismissed as improvidently granted*, 548 U.S. 124, 126 S. Ct. 2921, 165 L. Ed. 2d

399 (2006); *IGT v. Bally Gaming Int'l, Inc.*, 659 F.3d 1109, 1117 (Fed. Cir. 2011) ("We caution

that claim language must be construed in the context of the claim in which it appears. Extracting

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[5] Claim 1 of the '863 Patent.

a single word from a claim divorced from the surrounding limitations can lead construction astray.").

Defendants' "hardware only" construction also ignores claim language that requires that "ports" include virtual ports. For example, claim 27 of the '653 Patent recites a communication device "wherein the first wireless transmit and receive unit operates on a first network path to a remote server and the second wireless transmit and receive unit communicates to the remote server on a second network path," and dependent claim 28 recites the device, "further in communication with the remote server, wherein the mobile device is configured to receive multiple IP data packets on a plurality of ports at substantially the same time and send multiple data packets to the server, to allow multiple simultaneous communication paths over connections between the device and the server." Ex. 7, 15:8-20. Thus, claim 28 requires that the mobile device be configured to receive data packets on a plurality of ports in communication with a remote server over one or more _wireless_ network paths. This requires a plurality of virtual ports. Ex. 1001, ¶170.

Moreover, while Defendants assert that the specification recites only physical ports, the very content to which they cite contains a reference to a virtual port. As Defendants note, the specification teaches that "[t]he processor contained within the CT/MD 502 is further capable of delivering the required outputs to a number of different ports such as optical, USB, cable and others such as 1202 to 1210." Ex. 7, 4:60-63. The "ports" referred to here are illustrated at Figure 12, and include "[w]ireless" port 1210. Ex. 7, Fig. 12. The inclusion of wireless port 1210 in Figure 12, accompanied by the reference to "port" 1210 in the text, teaches the use of a virtual port, because in 1999 and 2000 (as today), wireless ports were typically implemented via a virtual port. Ex. 1001, ¶171. Furthermore, the specification teaches the implementation of a

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web server on the wireless device of the invention, Ex. 7, 10:27-31; as a POSITA would know, web servers incorporate or open virtual ports. Ex. 1001, ¶172.

Defendants' other arguments fare no better. For example, Defendants point to a snippet from the specification that they say describes "the present invention" as requiring hardware ports. This argument fails for two independent reasons. First, the specification does no such thing. It states that "[t]he present invention <u>includes</u> the following features," among which is "(4) A CT/MD that has multiple input/output ports as opposed to a single input/output (I/O) port as in the prior art." Ex. 7, 9:1, 21-22 (emphasis added). The generic reference to "input/output ports" does not require hardware ports, nor does it exclude virtual ports. Ex. 1001, ¶173. And the language is inclusive, not exclusive of virtual ports. Similarly, the text in the remainder of this paragraph is exemplary, not exclusive: "The CT/MD <u>may</u> have" various types of ports enabling it to interact with different environments. Ex. 7, 9:23-26 (emphasis added). Then, the specification reiterates the important aspect of the multiple ports: "The feature is more than one port being available with variations in the number of ports (I/O) from one to N." Ex. 7, 9:28-29. Thus, the specification says that what is important is that there be more than one port, not that the ports are hardware ports. There is nothing here requiring hardware ports, or excluding virtual ports. Ex. 1001, ¶173.

In addition, S/N 09/281,739 ("the '739 Application"), to which '653, '863, '946, '291 and '075 Patents claim priority, teaches that the device "may have additional input/output ports for plugging in auxiliary devices such as a digital camera, printer, and other devices through either wired <u>or wireless</u> means." Ex. 1009, at SM0000372 (emphasis added). The reference to a port for a wireless connection describes a virtual port. Ex. 1001, ¶174. This is additional

intrinsic evidence bearing on the scope of the claim. *E.I. du Pont De Nemours & Co. v. Unifrax I LLC*, 921 F.3d 1060, 1069-71 (Fed. Cir. 2019).

Defendants point to some cases narrowly construing claims based on express statements in the specification narrowly defining the scope of the invention. These cases are inapposite, because here there is no such express limitation of the scope of the invention in the specification or the prosecution file; indeed, as shown above, the intrinsic evidence discloses the very aspect that Defendants say was disclaimed. The specification here contains no disavowal of claim scope. *Unwired Planet, LLC v. Apple Inc.*, 829 F.3d 1353, 1358 (Fed. Cir. 2016).

Defendants also submit some dictionary definitions that they contend are consistent with a "hardware-only" construction. However, this extrinsic evidence is entitled to little or no weight given the lack of support in the intrinsic record for Defendants' "hardware only" construction. Also, the fact that Defendants were able to find some dictionary definitions that encompass a hardware port does not exclude a construction that encompasses virtual ports. In addition, to the extent that the Court is inclined to consider such extrinsic evidence, additional technical dictionary evidence supports Smart Mobile's proposed construction. Ex. 1003, p. 844 ("(10) An interface point connecting a communications channel and a device;" "(13) An abstraction of an access point to network communications.").

Defendants, finally, fall back on the argument that a narrow construction is required in order to avoid invalidity for lack of written description or enablement. However, they fail to make an argument for lack of enablement, and (as shown above) the specification does disclose a virtual port so there is no lack of written description. In addition, this doctrine only applies where the claim remains ambiguous after applying all the available tools of claim construction. *Phillips*, 415 F.3d at 1327-28. That is not the case here, so this argument fails as well.

Accordingly, the Court should construe "ports" to encompass both physical and virtual points of connection, as requested by Smart Mobile.

I.   **"application / applications" ('434 Patent, claim 2; '653 Patent, claims 5-6, 10-11, 17; '863 Patent, claims 6, 12; '291 Patent, claim 12; '946 Patent, claims, 5-6, 10-11, 17)**

Smart Mobile's Construction	Defendants' Construction
A software program that enables a device to perform one or more tasks.	Plain and ordinary meaning, which is a software program designed to assist in the performance of a specific task.

The parties agree that for the '434 Family patents an "application" is a software program with certain characteristics. Smart Mobile's construction defines "application" by its function. Defendants' construction, conversely, defines an application by what it is "designed" to do, importing a subjective "purpose" element that is disfavored. *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1369 (Fed. Cir. 2012). And Defendants' proposed construction is unhelpfully vague in other respects – what does it mean for a software program to "assist in the performance of" a task? Must the "assisted" entity be a user or may it be another program? And what is it that makes a task "specific?" The adjective is both unnecessary and confusing in context. Smart Mobile's construction is clear, and consistent with Defendants' dictionary definitions as well as with Plaintiff's. Ex. 1003, p. 46 ("application . . . (5) [a] computer program that performs some desired function."). The Court should adopt it. *Sun Microsystems, Inc. v. Network Appliance, Inc.*, 591 F. Supp. 2d 1069, 1096 (N.D. Cal. 2008) (court adopted the construction that was "slightly clearer, and therefore more helpful for the jury.").

J.   **"one or more subtasks are assigned to one or more channels" ('943 Patent, claims 1, 5, 8, 12)**

Smart Mobile's Construction	Defendants' Construction
Plain meaning, with the exception of "channels," which should be construed as proposed by Smart Mobile.	one or more communication paths between a transmitter and receiver are dedicated to one or more pre-defined subtasks.

Defendants' proposed construction should be rejected for multiple reasons. First, Defendants' proposal, which rewrites this limitation, is unnecessary. There is no need to construe the words "one or more" and "assigned," and Defendants' proposal keeps the word "subtasks," so no further construction is required here. That leaves the word "channels," which is addressed separately. See Section II.K. Thus, there is simply no need to construe this phrase.

Second, Defendants import numerous limitations from the '943 and '789 Patent specifications into this term. In particular, Defendants' proposal requires that (1) the "channels" be between a transmitter and a receiver, (2) the subtasks be "pre-defined," and (3) the channels be "dedicated" (not just assigned) to the subtasks. However, none of those limitations are recited in the relevant claims, and it is well-established that it is improper to import limitations from the specification into the claims. *Pulse Elec., Inc. v. U.D. Elec. Corp.*, 860 Fed. Appx. 735, 737 (Fed. Cir. 2021) (citing cases).

An invention will only be limited to its preferred embodiment when the patentee uses words that manifest a clear intention to restrict the scope of the claims to that embodiment. *Info-Hold, Inc., v. Applies Media Techs. Corp.*, 783 F.3d 1262, 1267 (Fed. Cir. 2015). Here, there are no such words; nothing in the claims or specification indicates that the claims should be limited to the embodiments presented in the specification. In fact, the opposite is true. The '943 Patent expressly states that its specific embodiments have been presented "for purposes of illustration and description" only, and "are not intended to be exhaustive or to limit the invention to the

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precise forms disclosed . . . ." Ex. 14, 11:47-53. Defendants also rely on a disclosure from the '789 Patent to try and limit this term. But even that disclosure merely states that "[i]t is *possible* to define and dedicate certain channels for various pre-defined or programmable tasks only." Dkt. 46, p. 27 (quoting '789 patent at 14:25-38) (emphasis added). Stating that something is merely "possible" for the '789 Patent invention does not come close to manifesting a clear intention to restrict the scope of claims in the '943 Patent.

Third, Defendants argue that subtasks are "telephony, TV, or security that can be assigned for transmission over [] communication channels," and not "processes performed by the device's processor." Dkt. 46, p. 28. However, Defendants' proposal fails to seek a construction for subtasks, so this argument is irrelevant. Moreover, the '943 Patent discloses that it is "*data relating to* tasks and subtasks" that is sent via communication channels, as opposed to the subtasks themselves. Ex. 14, 8:19-23. Defendants' attempt to re-write these claims should be rejected.

K.   "channel" ('943 Patent, claims 1-2, 5, 8, 12; '083 Patent, claims 1-2, 5, 8, 12)

Smart Mobile's Construction	Defendants' Construction
A path or link through which information passes between or within one or more devices or components.	Plain and ordinary meaning, which is communication path between a transmitter and receiver.

Defendants propose a construction of "channel" that limits the term to "a communication path between a transmitter and receiver." The claim language and the specification require a broader construction.

First, Defendants assert that the "ordinary meaning" of "channel" is a communication channel. However, this is not correct, Ex. 1001, ¶181, and their evidence does not support this assertion. First, they point to a description of "communication channels" to bolster their position. However, the term at issue is "channels," not "communication channels," so this is

beside the point. Their second exhibit, a single sentence from a treatise entitled "The Communications Handbook," is deficient for the same reason, and in any event is so broad ("bridge between a source and a receiver (sink)") that it supports Smart Mobile's construction. The Microsoft Computer Dictionary is a more pertinent source, and defines the term to cover both internal (processing) and external channels as well as communication channels:

> **channel** *n.* **1.** A path or link through which information passes between two devices. A channel can be either internal or external to a microcomputer. *See also* bus. **2.** In communications, a medium for transferring information. Depending on its type, a communications channel can carry information (data, sound, and/or video) in either analog or digital form. A communications channel can be a physical link, such as the cable connecting two stations in a network, or it can consist of some electromagnetic transmission on one or more frequencies within a bandwidth in the electromagnetic spectrum, as in radio and television, or in optical, microwave, or voice-grade communication. *Also called* circuit, line.

Ex 1006, p. 81. So, the ordinary meaning of "channel" supports Smart Mobile's construction, reflecting that a POSITA would understand the term more broadly than just a communication channel.

In addition, the intrinsic evidence precludes Defendants' construction. First, the claims of the '083 Patent repeatedly use "channel" to refer not just to communication channels, but also to processing data streams and multiple channels in parallel, including "via multiple channels." Ex. 12, 12:8-10; 13:12-14; 14:3-6 [claims 1, 8, 12]. And each of the independent claims of the '943 Patent includes a limitation expressly reciting that the processor <u>comprises</u> multiple channels, thereby clearly reciting processing channels. Ex. 14, 12:8-10, 45-47; 13:4-6; 14:4-6 [claims 1, 5, 8, 12]. Defendants' construction would render these claims nonsensical. Where the claim language is clear, a construction that would render it nonsensical is wrong. *Pause Tech.,*

LLC v. TiVo, Inc., 419 F.3d 1326, 1331 (Fed. Cir. 2005). In addition, Defendants' construction would render the recitation of "a single communication channel" in claim 2 of the '943 superfluous, as their construction restricts "channel" in every instance to a communication channel. For this reason too, their construction is wrong. *VirnetX Inc. v. Apple Inc.*, 792 Fed. Appx. 796, 811 (Fed. Cir. 2019).

The specification also forecloses Defendants' narrow construction. While the specification of the '083 Patent does teach communication channels, it also teaches the use of multiple channels for parallel processing of data streams. Ex. 12, Abstract ("The single processor may have multiple channels for parallel processing of each data stream . . . ."); 4:23-28; 7:21-47 (each of the separate data paths internal to the device is a "separate channel" that can be sampled and clocked individually); 7:48 – 8:12 (same for multiple fiber optic "channels" internal to the device); Figs. 10-11 (e.g., showing multiple "fibre optic channels" internal to the device). The common specification of the '943 Patent includes the same content. Ex. 14, 4:24-29; 7:26-52; 7:53 – 8:16; Figs. 10-11; Ex. 1001, ¶178.

Defendants argue that their construction of "channel" is required because there is content in the claims and specification "consistent with" the use of the term to refer to communication channels. However, the fact that some content in the specification references communication channels does not mandate a construction that excludes other types of channels, particularly where (as here) other types of channels are referenced in the specification. *Thorner v. Sony Computer Entertainment America LLC,* 669 F.3d 1362, 1366-68 (Fed. Cir. 2012). Defendants must point to "an expression of manifest exclusion or restriction demonstrating an intent to limit the term" in the manner they propose. *Id.* But they cite to nothing requiring exclusion of processing channels from the scope of the claim.

Defendants also contend that the specification of the '789 Patent supports their construction. It does not; the content to which they cite is consistent with both parties' constructions. Moreover, the '789 Patent is irrelevant to the meaning of "channel" in the '083 Patent, because the '083 Patent does not claim priority back to the application from which the '789 Patent issued. Ex. 12, 1:7-17.

Defendants next assert that amendments made during prosecution of the '083 Patent are "consistent with" the use of "channels" to refer to communication channels. First, as shown above, this is not sufficient to exclude a construction that encompasses processing channels. *Thorner*, 669 F.3d at 1366-68. Second, Defendants' suggestion that the prosecution file somehow disclaims processing channels has it exactly backwards – during prosecution of the '943 Patent (the immediate parent to the '083 Patent), the applicant added "wherein the processor comprises multiple channels configured to process the first data stream and the second data stream in parallel," distinguishing the cited art on this basis. Ex. 1010, SM0004647-53 (emphasis added). It could not be more clear: the processor "comprises" multiple channels, which must therefore be at least in part processing channels. Thus, the '943 Patent prosecution file, which is intrinsic evidence for both the '943 and '083 Patents, *Unifrax*, 921 F.3d at 1069-71, supports Smart Mobile's construction.

The prosecution file for the '083 Patent also supports Smart Mobile's construction. The claims as originally filed contained the "processor comprised of multiple channels" language originally added in the parent application to overcome the art cited by the examiner. Ex. 1011, SM0003982-86. During prosecution, this language remained unamended in claim 8, and was amended in claims 1, 5 and 12 to capture different aspects of the invention. In claims 1 and 12, the amendment recited that the device or system is "configured to process" multiple data streams

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"in parallel and to process multiple channels" (claim 1) or "in parallel via multiple channels" (claim 12). Ex. 1011, SM0003863-69. Thus, as noted above, each of claims 1, 8 and 12 include language reciting that the processor (or the system) is configured to process multiple channels; in order for the channels to be "processed" they must include channels internal to the device that are input to the processor. Ex. 1001, ¶180. The portion of the prosecution file quoted by Defendants, referencing "processing of signals of multiple channels," does not suggest otherwise, as the remainder of the explanation makes it clear that the distinguishing feature of the invention was the ability to parallel process signal and data streams, which is entirely consistent with a construction that includes processing channels rather than just communication channels. Ex. 1011, SM0003872.

Finally, Defendants attack Smart Mobile's language "path or link through which information passes," contending that the path must be a physical path such as a cable that "can be assigned a subtask." But there is nothing in the specification or prosecution file that limits the "path" to a physical structure; indeed, Defendants' own construction concedes that the path may be wireless. And while the claims of the '943 Patent may require that subtasks be assigned to a channel, the claims of the '083 do not include that element. So, there is no reason to read a physical path into the construction of "channel."

Accordingly, the Court should adopt Smart Mobile's construction, which is supported by the intrinsic as well as extrinsic evidence.

L.   **"the device is … further configured with enhanced capabilities to differentiate between various signals or to combine multiple paths into a single communication channel" ('943 Patent, claim 2)**

Smart Mobile's Construction	Defendants' Construction
The device is . . . further configured with at least two antennas, transmit/receive units and processors or processing channels.	Indefinite

Defendants argue that this phrase is indefinite because "the only teaching in the specification as to how a POSITA might achieve the claimed 'enhanced capabilities' is to use multiple antennas," but claim 1 already recites "a plurality of antennas," so claim 2 is indefinite. Dkt. 46, p. 32. Both the premise and the conclusion are flawed.

A term of degree (such as "enhanced capabilities") is not inherently suspect. *Sonix Tech. Co., Ltd. v. Publications Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017). A claim incorporating such a term is not indefinite if the intrinsic evidence provides guidance as to the scope of the claim. *Id.* Here, there is such guidance.

First, the claim itself recites bounds on the "enhanced capabilities": they are "to differentiate between various signals or to combine multiple paths into a single communication channel." And the specification provides examples of such enhanced capabilities. For instance, Fig. 3 of the '943 Patent illustrates a prior art system having "a computer to computer data path with a single channel 300." Ex. 14, 3:49-50. The prior art is described as suboptimal because "there is only one path . . . [thus] this system does not form an efficient, convenient interface." *Id.* at 3:66-4:1. To overcome that deficiency, the '943 Patent teaches that, in an embodiment, adding antennas to the cellular telephone/mobile device ("CT/MD") would provide "enhanced capabilities to differentiate between various signals or to combine multiple paths into a single communication channel." *Id.* at 4:7-11. And the specification teaches that "enhanced

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capabilities" and a "performance edge" may result from using multiple transmitter/receiver units in the device, *id*., 1:47-51 ,4:32-36, and that in such a device:

> the single processor may have multiple channels for parallel processing of each data stream to process accurately two distinct signals 408 that were more optimally received by two dedicated antennas and two separate T/R units contained within the CT/MD [cellular telephone/mobile device] to improve performance and quality of output. An example is a CT/MD 402 which is optimized for video and voice.

Ex. 14, 4:24-31. The specification goes on to describe a "dual antenna, dual T/R unit 504 in a CT/MD 502 interfacing with a dual processor 506 in the present invention in a dual band system 500." Ex. 14, 4:30-44, Fig. 5A.

So, the specification provides a baseline against which to compare the "enhanced capabilities" – they are enhanced with respect to prior art mobile devices (exemplified by Fig. 3 and the accompanying text) that included only one antenna, one transmit/receive unit and one processor or processing channel. So, the configuration for "enhanced capabilities" of claim 2 requires at least two antennas, transmit/receive units and processors or processing channels.

Defendants contend that claim 2 cannot require multiple antennas, because that is already recited in claim 1. This is not an indefiniteness argument, but a claim differentiation argument to narrow the scope of claim 2. Yet claim 2 is already narrower than claim 1, which does not require multiple transmit/receive units or processors or processing channels. So Defendants' effort to bootstrap indefiniteness fails. The Court should adopt Smart Mobile's construction.

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M.   "interface" ('653 Patent, claims 1, 6, 10, 11, 17; '863 Patent, claim 14; '946 Patent, claims 1, 5, 6, 10, 11, 17)

Smart Mobile's Construction	Defendants' Construction
A virtual or physical connection between software and/or hardware elements that enables them to interoperate.	Plain and ordinary meaning, which is "a shared electrical or mechanical boundary between two hardware devices."

Defendants contend that an interface must comprise a shared boundary between two pieces of hardware. But "interface" is not so limited, and in 1999 (as today) was understood to include software or virtual interfaces, such as interfaces between two software modules or processes. Ex. 1001, ¶182. Defendants do not actually contest this fact – they admit that "some definitions of 'interface' may include software as an alternative definition," Dkt. 46, p. 36, and their dictionary definitions bolster the point. *See, e.g.*, Ex. 46 ("The connection between two hardware devices, between two applications, or between different sections of a computer network.") (emphasis added). It is, then, undisputed that the ordinary meaning of "interface" in computer science includes virtual interfaces between software entities. Ex. 1006, p. 241 ("The point at which a connection is made between two elements so that they can work with each other or exchange information. 2. Software that enables a program to work with the user . . . , with another program such as the operating system, or with the computer's hardware.") (emphasis added); Ex. 1001, ¶183. These definitions encompass virtual interfaces between software entities.

In addition, the claim language clearly encompasses virtual interfaces. For example, claim 1 of the '653 Patent recites, e.g., a "transmission interface" that is "created," as well as a "single interface comprised of multiplexed signals from the plurality of wireless transmit and receive components." Ex. 7, 12:10, 14-16. The recitation that the transmission interface is "created" and that the single interface is "comprised of" signals indicates that they are software

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entities, not hardware. Claim 5 recites the device of claim 2 (which depends from claim 1),

wherein the device uses protocols including "application interfaces;" an application interface is

necessarily a software interface. *Id.*, 12:34-38. Claim 6 contains language similar to that in

claim 1, reciting that the processor on the device "is configured to combine the data paths into a

single transmission interface to one or more applications on the mobile device." *Id.* 7, 12:45-47.

Here again, it is "data paths" that are combined into "a single transmission interface," which

clearly speaks to a software interface rather than hardware. Ex. 1001, ¶184.

Claim 10 is even more explicit:

> 10. The device of claim 1, wherein multiple wireless trans-
> mit and receive components are presented to the application
> as a single connection interface such that the multiple trans-
> 60 mission interfaces are virtualized into a single transmission
> interface.

Ex. 7, 12:57-61. Claim 10 specifies that the T/R components (e.g., the cellular baseband and Wi-

Fi module) are presented to the application (i.e., software) as a single connection interface, which

indicates that the single interface connecting the application (software) to the T/R components is

virtualized. Then, the claim states that the transmission interfaces are virtualized into a single

transmission interface. So, the single transmission interface, too, is virtual. Ex. 1001, ¶185.

Claims 1, 5, 6 and 10 of the '946 Patent are materially identical. Ex. 9, 12:17-24, 43-47,

48-56, 66 – 13:3. And claim 14 of the '863 Patent expressly recites that the interface is "wired

and/or wireless." Ex. 8, 12:64 – 13:5. So, the relevant claim language encompasses virtual

interfaces. Ex. 1001, ¶186.

Defendants contend that the specification refers only to physical points of connection

between hardware devices, but that is not so. First, the claims originally filed in an application

constitute part of the specification, *Mentor Graphics Corp. v. EVE-USA, Inc.*, 851 F.3d 1275,

1297 (Fed. Cir. 2017), and here the claims as filed in the application that issued as the '653

Patent included the relevant language of claim 1 (which was dependent claim 4 as originally

filed) and claims 6 and 10 verbatim. Ex. 1004, at SM00002896-97. So, the specification

necessarily discloses virtual interfaces. And each of the '946 and '863 Patents claim priority

back through the application that issued as the '653 Patent. Ex. 8, 1:7-18; Ex. 9, 1:7-19. Thus,

Defendants' argument that the claims should be construed so as to preserve their validity has no

bearing here because the claims satisfy the written description requirement.

Second, the body of the specification discloses wireless interfaces. In order to support a

particular construction the specification need not repeat the claim terms verbatim; it is sufficient

that a POSITA would understand the claims, read in light of the specification, to have a

particular meaning. *Novartis Pharm. Corp. v. Accord Healthcare, Inc.,* 21 F.4th 1362, 1373

(Fed. Cir. 2022). Here, the specification contains content that informs a POSITA that virtual

interfaces will be generated in the operation of the invention. Ex. 1001, ¶187. For example, in

one embodiment, three data streams (1002, 1004, 1006) are processed by three transmit/receive

units (e.g., Wi-Fi and cellular components) and presented to a processor. Ex. 7, 7:21-27. The

data streams may then "be interfaced separately with server C 1030 or combined into data stream

1028 and interfaced to Server C 1030":
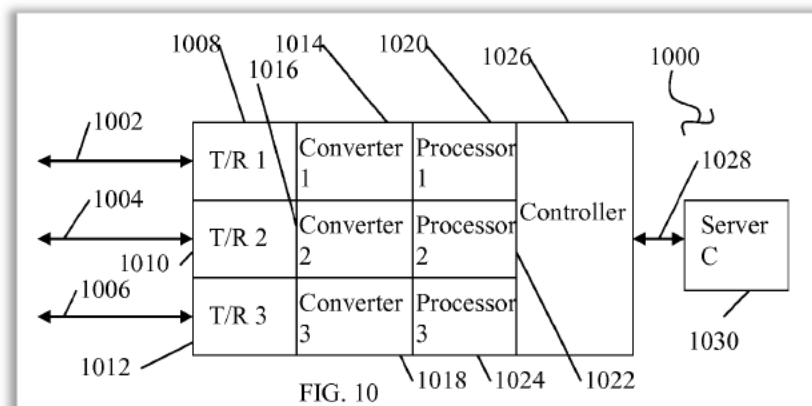
FIG. 10

Ex. 7, 7:28-30, Fig. 10. A POSITA reading the claims in the context of the specification, and applying his knowledge and expertise, would understand that upstream of data stream 1028, a virtual interface (such as an API) for transmitting the data stream to Server C would be generated. Ex. 1001, ¶187. This transmission interface would then use downstream interface(s), such as physical or virtual interfaces associated with the wireless transmit/receive units of the device, as the signals from the transmission interface pass through the downstream interfaces and are sent through the wireless T/R units to Server C, as indicated at 1028. *Id.*

In addition, the specification explains that the invention includes various features, such as "[t]he ability to have an internal IP based web server function within the CT/MD and the network switch box or an external server C connected by wired or wireless means to keep track of all the communication protocols within the unit and with the outside world and other units." Ex. 7, 10:27-31. A POSITA would understand that this IP-based web server would allow for data communication by software interfaces between applications on the device, within the device and between the device and other devices. Ex. 1001, ¶188. Here, too, the specification references a function for generating virtual interfaces.

Furthermore, the specification discloses that the mobile handheld devices may support software for audio, video, gaming, entertainment and other applications that can be optimized for the particular software application as a result of the multiple processors and multiplexed paths interactions between software programs. Ex. 7, 9:16-19; 10:1-4, 18-21. And the specification discloses that "the software capability that is resident internally to the unit . . . is capable of dynamically determining a number of factors for best data transfer," such as best transmission frequencies and protocols. Ex. 7, 11:22-30. This suggests that the various software programs and applications resident on the device will interface with the hardware and with other software

programs. Ex. 1001, ¶189. So, here too, the specification does disclose virtual interfaces, and

there is no disclaimer that would exclude virtual interfaces.

In yet another embodiment, the specification discloses that "the signal path selection

[may be] done by a user defined menu driven software . . . ." A POSITA would know that the

"user defined menu driven software" for "signal path selection" would, in the operation of the

device, generate one or more interfaces between software entities on the device. Ex. 1001, ¶190.

Here again, a POSITA would understand that the specification discloses structure (the software)

that will generate a virtual interface in the operation of the device.

Moreover, the '739 Application teaches that "each of the input/output channels could be

hardwired designed or software programmable to interface with various types of input/output

data communication lines." Ex. 1009, at SM0000251. The reference to a software

programmable interface indicates that the interface is virtualized. Moreover, the '739

Application discloses functionalities in which one process (for example, spoken word input)

interfaces with another (for example, translation) either internal to the device or across a wireless

connection with an external server. Ex. 1009, at SM0000374-81, 384, 391. This, too, suggests

the operation of virtual interfaces between the referenced functionalities. Ex. 1001, ¶191.

Indeed, the '739 Application teaches that "each of the input/output channels could be hardwired

designed or software programmable to interface with various types of input/output data

communication lines." Ex. 1009, at SM0000384. A POSITA would understand the reference to

software-programmable I/O channels that interface with I/O data communication lines to

indicate the use of virtual (program to program) interfaces. Ex. 1001, ¶192.

Defendants' laundry list of cites to portions of the specification purportedly disclosing

hardware interfaces falls far short of what they would need to exclude virtual interfaces from the

scope of the claim. They rely on the inclusive language of the specification – e.g., listing

"[s]ome unique features of the present invention" – to support an argument for categorical

exclusion of virtual interfaces, when the cases to which they cite addressed strikingly different

language.[6] That is not sufficient. *Thorner*, 669 F.3d 1362. Here, unlike in Defendants' cases, the

claim language does not limit the interface to a hardware interface, the specification does not

state that "the present invention" is limited to a hardware interface, language in the specification

directed to hardware interfaces does not categorically exclude virtual interfaces (as in the *AGA*

Medical Corp. and *SciMed* cases), and there is nothing in the prosecution file suggesting a

limitation to a hardware interface.

It is undisputed that the plain meaning of "interface" includes virtual interfaces, and the

intrinsic evidence provides no support for Defendants' effort to limit the term to hardware

interfaces. Accordingly, the Court should construe "interface" as proposed by Smart Mobile.

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[6] In *Honeywell Intern., Inc. v. ITT Indus., Inc*., 452 F.3d 1312, 1318 (Fed. Cir. 2006), the specification repeatedly referred to "the present invention" as a fuel filter. In *Regents of Univ. of Minnesota v. AGA Medical Corp*., 717 F.3d 929, 934-37 (Fed. Cir. 2013), the ordinary meaning of the claim language, the specification and the prosecution file all demonstrated that "first and second occluding disks" were two discrete disks rather than a unitary structure. In *S Life Sys. Inc. v. Advanced Cardiovascular Sys., Inc*., 242 F.3d 1337, 1342-43 (Fed. Cir. 2001), the specification disparaged prior art dual-lumen catheters, referred to "the present invention" as having structure for a coaxial lumen, and expressly stated that the coaxial lumen structure was "is the basic sleeve structure for *all embodiments of the present invention contemplated and disclosed herein*." *Id*. (emphasis in original).

N.   "multiplex / multiplexes / multiplexed / multiplexing" ('653 Patent, claims 1-
4, 27); '946 Patent, claims 1-4, 16, 27; '291 Patent, claim 7; '083 Patent,
claims 5, 8, 12, 19; '943 Patent, claims 2, 11; '075 Patent, claim 1)

Smart Mobile's Construction	Defendants' Construction
To combine multiple signal streams or data streams into a single signal stream or data stream for transmission or further processing, or split a single signal stream or data stream into multiple signal streams or data streams for transmission or further processing.	Plain and ordinary meaning, which is "to interleave or simultaneously transmit two or more messages on a single communications channel." The preamble of claim 1 of the '075 patent is limiting.

Defendants assert that "multiplexing" means "interleaving or simultaneously transmitting two or more messages from a plurality of channels on a single communications channel." The intrinsic evidence compels a broader construction that encompasses splitting signal and data streams into multiple streams, as well as combining them into a single stream, for transmission or processing. Ex. 1001, ¶193.

First, the claims use the term to refer to communication of signal and data streams over multiple paths, not just a single path or channel. For example, claim 1 of the '653 Patent recites, in relevant part, a "single interface comprised of multiplexed signals from the plurality of wireless transmit and receive components." And claim 4, which depends from claim 1, recites:

> 4. The device of claim 1, wherein the device is configured
> 30 to communicate with at least one server, wherein the rate at
> which data is transferred between the device and the server is
> improved by parallel paths and wherein data transmitted and
> received is multiplexed at each end.

Ex. 7, 12:29-33. So claim 4 requires that the device be configured to transfer data between the device and a server via parallel paths (i.e., at least two paths), that the transfer via parallel paths improves the data transfer rate, and that the transmitted data be "multiplexed at each end." The requirement that the data transfer rate be "improved" by the use of parallel paths suggests a

comparison with data transfer that does not use parallel paths, i.e., a single path. And the data

are multiplexed at each end. So as used in claim 4, "multiplexing" encompasses splitting the

data stream into parallel paths (e.g., cellular and Wi-Fi) at the sending end, and recombining the

parallel paths into a single data stream at the receiving end. Ex. 1001, ¶194. This supports

Smart Mobile's construction, and demonstrates a usage of "multiplexed" that is broader than

Defendants' "single communications channel" construction. Since claim 4 depends from claim

1, claim 1 should be construed to encompass the structure and functionality of claim 4.

Littelfuse, Inc. v. Mersen USA EP Corp., 29 F.4th 1376, 1379-80 (Fed. Cir. 2022). Claims 1 and

4 of the '946 Patent contain materially identical language, also supporting Smart Mobile's

construction.

   Claim 27 of the '653 Patent also recites multiplexing over multiple communication paths.

Although Defendants contend that this claim supports their position, it does not. Tellingly, they

omit from their quote of the claim language the most relevant portion of the text, which in full

reads: "and wherein a plurality of signal [sic] are multiplexed <u>to increase throughput and enable</u>

<u>simultaneous multi path communication</u>." Ex. 7, 15:12-14 (the portion omitted by Defendants is

underlined). The claim in full states that the multiplexing of the signals enables simultaneous

multi-path communication, i.e., multiple signal streams, rather than Defendants' "single

communication channel." Ex. 1001, ¶195.

   Second, the specification uses the term to refer to multiplexing across multiple paths. For

example, the specification teaches that the rate at which data may be transferred from one

computer system to another "is improved by the parallel paths provided by the present invention.

The signal is sampled and may be multiplexed at each end, at a rate that assures accuracy." Ex.

7, 3:43-48. The usage of parallel communication paths and the reference to multiplexing the

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signals at each end indicates that splitting the signal or data streams into multiple paths (at the

sending end) and combining the multiple paths back into a single signal or data stream (at the

receiving end) are both aspects of multiplexing as the term is used in the patents. Ex. 1001,

¶196.

In addition, in connection with a network box embodiment, the specification teaches that

the units have the ability to "multiplex the data for wireless transmission over one or more

channels, at one or more frequencies and power levels," to "multiplex between one or more

transmission protocols," and that the unit "multiplexes the transmission paths . . . ." Ex. 7, 11:1-

30 (emphasis added). Here, the specification describes multiplexing over multiple

communication channels and paths, and teaches multiplexing between multiple transmission

protocols, which one would not do over a single communication channel. Ex. 1001, ¶197. So

here again, the specification uses "multiplexing" to refer to splitting a signal or data stream into

multiple streams for transmission, or combining multiple streams into one.

Teaching yet another advantage provided by the invention, the specification discloses:

> this invention allows parallel processing of the signals and data streams through the antennas, through the T/R units, through the multiple processors and through the I/O. This allows the present invention to achieve faster data rates with flexible connections for making multiple applications sequentially or simultaneously available using the same CT/MD or network switch box. As an example, video, audio and other uses can be accessed simultaneously with performance optimized for each through dedicated or multiplexed antenna paths, T/R paths, through multiple processors and I/O paths.

Ex. 7, 10:10-21. The reference to multiplexed antenna paths informs a POSITA that the patents

contemplate multiplexing over multiple paths rather than just a single channel. Ex, 1001, ¶197.

In addition, the disclosure of parallel processing of the signals and data streams through the

antennas and T/R units, and of multiplexed T/R paths, is significant because it refers to

multiplexing data streams internal to the device, such as splitting a data stream at the main

processor and sending the streams to multiple T/R units to be transmitted via the antennas in

parallel. Ex. 1001, ¶198. So here, the specification teaches both internal and external

multiplexing via multiple paths and streams.

Moreover, the '739 Application includes disclosure of a "MULTIPLEXING

TRANSMIT/RECEIVE DEVICE" that illustrates an "OUTPUT MUX" (output multiplexer):
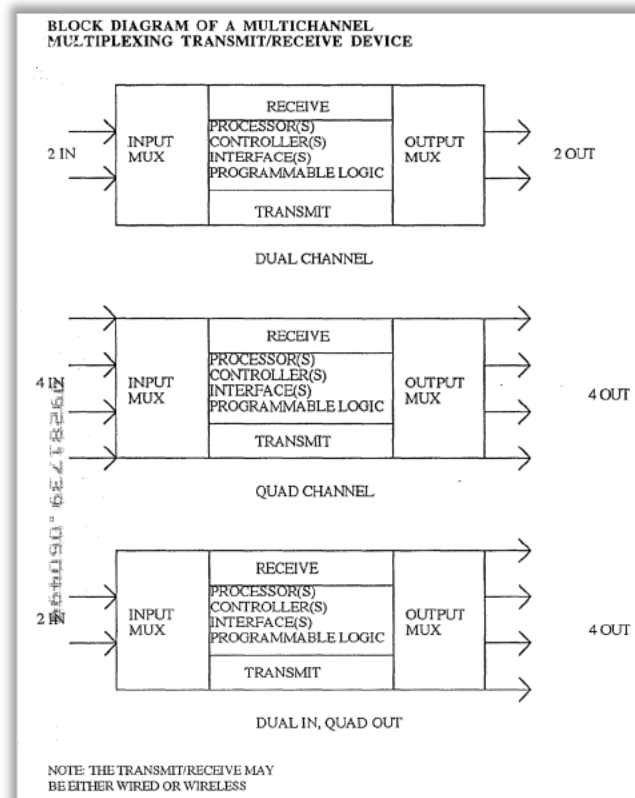
Ex. 1009, at SM0000349. This figure is significant, because it depicts both the input function

(INPUT MUX) and the output function (OUTPUT MUX) as multiplexing. In any multiplexing

operation, one end involves disaggregating the signal or data stream and the other end involves

aggregating the signal or data stream. So the use of "MUX" on both ends indicates that

multiplexing is being used to refer to both operations – splitting the signal into multiple streams,

and combining multiple signals into a single stream. Ex. 1001, ¶199.

In addition, in the bottom panel, the figure depicts the input multiplexer accepting two

signal streams ("2 IN"), and the output multiplexer outputting four signal streams ("4 OUT").

This illustrates that the device is capable of the operation that Defendants exclude from their construction – splitting a signal (each of the two input signals) into multiple signal streams (the four output signals) for transmission. Ex. 1001, ¶200.

Finally, Defendants' proposed construction would undermine the stated purpose of the invention. The '434 Family patents disclose and claim various embodiments of a mobile device (or, for the '863 Patent, a network architecture) in which multiple antennas, transmit/receive units, processors and other components are leveraged to enable enhanced performance, such as higher data transfer rates and faster processing of signal and data streams. *E.g.*, Ex. 7, 1:47-57, 2:42-48, 4:14, 36, 9:12-20, 10:17-21. Multiplexing is described as being an important factor in the enhanced capabilities of the device. E.g., Ex. 7, 3:42-48 ("The rate at which data from system 202 to system 204 is transferred is gated by the speed of the transmit and receive units is improved by the parallel paths provided by the present invention. The signal is sampled and multiplexed at each end, at a rate that assures accuracy."). It would make no sense to hobble the invention described and claimed in the patents with a multiplexing function limited to a single communication channel, when the specification repeatedly describes the benefits of the invention as available due, in part, to the ability to communicate over multiple paths.

Defendants ignore all of this intrinsic evidence, i.e., the most probative evidence of the meaning of the claims. *Phillips*, 415 F.3d at 1315-17. Instead, they cite to a few dictionary definitions, which cannot overcome the intrinsic evidence supporting Smart Mobile's construction, *Vederi, LLC v. Google, Inc.*, 744 F.3d 1376, 1382-83 (Fed. Cir. 2014), and wave their hands around a few claims and snippets of the specification that use the term "multiplexing" in a manner fully consistent with Smart Mobile's construction.

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Thus, the specification, as well as the language of the claims, supports Smart Mobile's construction. Construing the claims to encompass multiplexing via multiple streams will not render them invalid for lack of written description or enablement, and Defendants fail to even seriously argue the point. The Court should therefore construe the term to include both (i) combining multiple signal streams or data streams into a single signal stream or data stream for transmission or further processing, or (ii) splitting a single signal stream or data stream into multiple signal streams or data streams for transmission or further processing, as proposed by Smart Mobile.

O.   "server" ('653 Patent, claims 4, 15, 27, 28; '863 Patent, claims 1, 4, 5, 6, 11, 14, 19, 24; '946 Patent, claims 1, 4, 15, 17, 27, 28, 29, 30; '083 Patent, claims 6, 8; '943 Patent, claim 6; '075 Patent, claim 1)

Smart Mobile's Construction	Defendants' Construction
a computing device or program or collection of computing devices or programs that provides resources, data, services, or programs to other computing devices or programs over a network, or that enables access to a network or network resources	Plain and ordinary meaning

Defendants did not proffer a construction of "server" in their brief concerning the '434 Family patents; Smart Mobile assumes that they would argue "plain meaning." Regardless, the ordinary meaning of "server" aligns with Smart Mobile's construction, Ex. 1001, ¶¶32, 36; Ex. 1003, p. 1031, the claims use the term in an open-ended manner ("a" server), *Baldwin Graphics Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342-43 (Fed. Cir. 2008), and the patents include no limiting definition or disavowal. Accordingly, a POSITA would have understood that "server" could mean one or a collection. Ex. 1001, ¶¶32, 36.

III.   CONCLUSION

For the reasons set for above, the Court should adopt Smart Mobile's constructions.

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Respectfully Submitted,

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<u>CERTIFICATE OF SERVICE</u>

I hereby certify that counsel of record who are deemed to have consented to electronic service are being served this 17th day of August, 2022, with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a). Any other counsel of record will be served by electronic mail, facsimile transmission and/or first-class mail on this same date.

<div align="right">

/s/ Philip J. Graves
Philip J. Graves

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